

Log I-105

## NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C. 20594



### Safety Recommendation

---

**Date:** May 25, 1995

**In Reply Refer To:** I-95-2

The Honorable Federico Peña  
Secretary  
U.S. Department of Transportation  
Washington, D.C. 20591

---

On September 22, 1993, about 2:45 a.m., barges that were being pushed by the towboat MAUVILLA in dense fog struck and displaced the Big Bayou Canot railroad bridge near Mobile, Alabama.<sup>1</sup> (When the towboat struck the bridge, the pilot was on the Big Bayou Canot, a bayou of the Mobile River. He thought he was on the Mobile River.) About 2:53 a.m., National Railroad Passenger Corporation (Amtrak) train 2, the Sunset Limited, en route from Los Angeles, California, to Miami, Florida, with 220 persons on board, struck the displaced bridge and derailed. The three locomotive units, the baggage and dormitory cars, and two of the six passenger cars fell into the water. The fuel tanks on the locomotive units ruptured, and the locomotive units and the baggage and dormitory cars caught fire. Forty-two passengers and 5 crewmembers were killed; 103 passengers were injured. The towboat's four crewmembers were not injured.

Emergency responders were delayed in identifying the location of the accident site because Big Bayou Canot bridge had no waterway mile marker or nameplate, thereby creating confusion and hindering marine response activities. When the captain of the MAUVILLA notified the Coast Guard Group Mobile that an accident had occurred, he was unable to identify the bridge; train 2's crew was unable to do so as well. Marine responders were uncertain which bridge was involved until about an hour after the accident. This confusion about the accident location would have been eliminated had the bridge borne a marking that response centers could recognize.

---

<sup>1</sup>For more information, read Railroad-Marine Accident Report--*Derailed Amtrak Train No. 2 on the CSXT Big Bayou Canot Bridge Near Mobile, Alabama, September 22, 1993* (NTSB-RAR-94/01).

Not long after the accident at Mobile, another bridge striking occurred that posed a similar identification problem. At 9:55 a.m. on December 1, 1993, the towboat JENNIE DEHMER and its two-barge tow struck the Norfolk Southern Railroad bridge at mile 647.3, Tennessee River, in Knoxville, Tennessee, displacing the bridge pier 12 to 18 inches and the track 9 inches. The towboat operator on watch reported the accident at 10:00 a.m. to the Coast Guard Group Ohio Valley radio operator, giving the location as the Louisville and Nashville (L&N) Railroad bridge "just above the 647 point something or other [646.6], here in downtown Knoxville."

About 11:10 a.m., CSXT, which owns the L&N bridge, informed the Coast Guard that the bridge involved was in fact the Norfolk Southern Railroad bridge at mile 647.3. The dispatcher in Knoxville called about 11:45 a.m. to advise the Coast Guard that someone looking out his office window had seen the accident and immediately called Norfolk Southern Railroad, which was able to prevent a train about 4 miles from the damaged bridge from crossing it.

If bridges over waterways had a marking that was visible from both water and land, identification would be simple and quick and confusion could be diminished. Marking a bridge would help mariners and others readily identify it and advise emergency response personnel of the location, thereby facilitating notification of the bridge owner and proper authorities, who could control or stop bridge traffic. As the Mobile and Knoxville accidents demonstrate, prompt bridge identification is critical to ensure efficient movement of response forces to the accident scene and to halt land traffic about to use damaged structures.

The Safety Board concludes that all bridges vulnerable to impact by commercial marine traffic should be required to have appropriate markings so that they can be identified promptly from land and water in the event of an accident or other emergency. The Safety Board believes that the Department of Transportation should require such markings and periodically publish a list of them as part of a national bridge register. Such an inventory should be available to emergency response organizations and, following publication, should be included on navigation charts.

On September 30, 1994, the National Transportation Safety Board issued Safety Recommendations M-94-37 and -38, asking the U.S. Coast Guard to take the following two actions: (1) require that all bridges vulnerable to impact by commercial marine traffic bear unique, readily visible markings so that waterway and bridge users are better able to identify bridges involved in an accident when they report such accidents to emergency responders, and (2) periodically publish a list of bridge identification markings in a national register of bridges.

Because the Coast Guard is working with bridge owners and the Federal Railroad Administration to ensure that bridges are marked, Safety Recommendation M-94-37 has been

classified "Open--Acceptable Response," pending completion of the bridge-marking project. Safety Recommendation M-94-38 has been classified "Closed--Acceptable Action" because the Coast Guard agreed to list bridge identification markings in existing marine publications, such as the Army Corps of Engineers Navigational Charts, the *United States Coast Pilot*, and the *United States Coast Guard Light List*. Although the Coast Guard lists satisfy the needs of the marine community, the lists would not normally be available to nonmarine emergency responders, such as the police and fire departments, which initially experienced difficulty in responding to the scene of the Mobile accident because of confusion about the location.


Because all emergency responders must have access to bridge location and identification information, the Safety Board believes that the U.S. Department of Transportation, Office of Intermodalism, should ensure that the information is disseminated to them.

Therefore, the National Transportation Safety Board recommends that the U.S. Department of Transportation, Office of Intermodalism:

Establish a mechanism to ensure that a complete list of bridges vulnerable to impact by commercial marine traffic, with exact locations, is disseminated to all emergency response services so that all bridges can be easily identified in an emergency situation.  
(Class II, Priority Action) (I-95-2)

The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation I-95-2 in your reply. If you need additional information, you may call (202) 382-6860.

Chairman HALL, Vice Chairman FRANCIS and Member HAMMERSCHMIDT concurred in this recommendation.

  
By: Jim Hall  
Chairman